



DECEMBER, 1942

BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO

Review of Seventh District Business

A more than seasonal expansion of department store sales, which started in November this year, carried the Federal Reserve Bank of Chicago index to 168 per cent of the 1935-39 average, an all-time November high, surpassing even the years 1929 and 1937. As Christmas came closer, the sales continued to rise. Buyers apparently fearing a depletion of stocks of certain goods started their shopping early, and by the end of the third week of December, sales in the District had reached another peak. Cumulative sales for the first three weeks of December were 10 per cent more than for the corresponding weeks of 1941. The largest gain was recorded in Indianapolis, Indiana, where sales were running 19 per cent ahead of a year ago. Milwaukee, Wisconsin, also showed substantial increases in dollar volume, and sales in that city were 18 per cent higher than for the corresponding period of 1941. Sales in Chicago were only 7 per cent greater than last year for the three-week period ending December 19.

Production for the war program continued to maintain output at a high level, notwithstanding unbalanced production schedules, problems in the utilization of manpower, raw material bottlenecks, and changeovers to new types of war products. The result has been a flattening in the curve of industrial production and total manufacturing employment. Payrolls, however, moved up slightly. Production has been spotted by gains in some industries and recessions in others. Blast furnaces in the Chicago area operated at 101.6 per cent of rated capacity during November and at a slightly lower rate during the first half of December. Detroit mills maintained operations at about 105.5 per cent throughout the same period. Pig iron production in the Chicago area is estimated to have been 1,096,840 net tons, which is a 2.2 per cent increase over the year's previous high in October. Cold weather and labor shortage slowed the movement of scrap metal, forcing some mills to draw upon accumulated inventories.

The 1942 iron ore movement on the Great Lakes was the largest on record. A total of 92,077,000 tons was brought down from the upper lakes region. This amount was 577,000 tons in excess of the War Production goal for the year. Ore shipments ended during the second week of December, because of sub-zero temperatures and storms in the upper lakes region.

Bituminous coal production in the District continued to gain moderately on a daily average basis, and in November totaled 6 per cent more than in the same month a year ago. The gain for the year to date amounts to about 16 per cent. Coal receipts at the upper lake docks continued greatly below those of a year ago, and the excess built up during the earlier months this year in comparison with last year has now been eliminated. Reloadings of coal from these docks have been heavier than last year, and the gain to date amounts to about 10 per cent. Stocks have been reduced sharply and are now on a level with those held a year ago. In the country as a whole, bituminous coal stocks continue substantially larger than last year. Stocks held by industries show an excess of 50 per cent, and those at retail yards 10 per cent.

Production of petroleum within the District as well as refinery operations were at a slightly lower rate in November than in October. Production continued at a rate of about 30 per cent below that of a year ago, and the cumulative volume for the year to date is still slightly larger than last year. Gasoline production was about 12 per cent less in November than in the same month a year ago. Stocks of gas oils and distillate fuels are higher now than a year ago. Stocks of residual fuel oil are considerably smaller than at this time last year.

Construction activity showed a definite decline from October, and the comparison with a year ago is less favorable than previously. This existed in spite of the fact that residential building in defense areas was sharply accelerated, the awards of such building being the heaviest since last March. Public works and utilities also expanded.

War-Time Trends In Pulp and Paper

The pulp and paper industry in the Seventh Federal Reserve District enters 1943 with uncertain prospects after two years of continual adjustment to the shifting requirements of a nation moving toward total war. At present the greatest concern of the industry is current and probable future Government curtailment orders and price regulations. Some of the pulp and paper producers in the District, notably in Wisconsin, however, exhibit restrained confidence with respect to the coming year because of potentially favorable supplies of pulpwood, manpower, and prime motive power, and substantial demand for their products. The conditions underlying this limited confidence may, of course, change with little or no warning, as these manufacturers are well aware. The pulp and paper industry whose war-time essentiality has been questioned is now hard at work developing new paper products and derivatives to improve war-time packaging and relieve the shortages of strategic metals and other materials.

SCOPE AND SIGNIFICANCE OF PULP AND PAPER

Pulp is the fibrous product usually made from wood which provides the raw material for paper making and related products. Paper outwardly appears to be an industry of comparatively uniform products, but actually has at least ten distinct product divisions: book, writing, board, tissue, wrapping, ground-wood specialties, newsprint, glassine-greaseproof, absorbent, and building. Many of these industry branches use different raw materials and are largely independent of the others; hence, generalizations about the industry frequently will not apply to particular branches. The number of different types of paper has been estimated to exceed 10,000.

Production of pulp and paper mills in peace-time (1939) ranks as the fifth most important industry (product valued at more than \$250 million) in the states included in whole or in part within the Seventh Federal Reserve District, and sixth in the entire United States, according to United States Census of Manufactures data for 1939. Among the District states, pulp and paper production is the second most important industry in Wisconsin and in Michigan, of less importance in Illinois and Indiana, and negligible in Iowa.

More than one-fifth, 22.8 per cent of the nation's total paper output, amounting to 21 million tons in 1941, is normally manufactured within the Seventh District states. The proportion is higher in the case of book paper, 27 per cent; writing paper, 27 per cent; paperboard, 26 per cent; and tissues, 25 per cent. In October 1942, the District states had 202, or 21 per cent, of the 969 pulp and paper mills in the United States. Wisconsin (84 mills) and Michigan (68 mills) collectively account for about three-fourths of the mills in the five District states, and produce all of the pulp manufac-

tured in the same region. More than 37,000 workers having 163,000 additional dependents rely on the pulp and paper industry as a source of livelihood in the District states.

PAPER DEMAND AND PRODUCTION

Paper demand and production in 1942 will not equal the records established in 1941, when throughout the District and the nation the industry experienced the largest increases in demand and production in its history. The outstanding gains in 1941 reflected expanded defense-war expenditures by civilians and Government, but in part, at least, were attributable to the building up of inventories as protection against the serious "paper shortage" openly predicted for 1942. Orders for unprecedented amounts of paper and paper products flooded the mills during the latter half of 1941, and carried production at record levels through the early months of 1942. However, by April 1942 inventory demands were for the most part satisfied, and it became evident that the "paper shortage" was largely nonexistent. The general buying wave subsided and many of the paper mills in the District reduced their production schedules during the spring and summer months of 1942, a fact which was to influence their subsequent allowable production under the WPB "freeze" order. Demand and production of paper and paper products reached the lowest level of 1942 in July, but have since recovered moderately because of increased needs for direct and indirect war purposes, seasonal factors, further speculative purchases because of Government "freeze" orders, and gradual reductions of the large inventories accumulated during the previous year.

Paper production in the Seventh District established a new record in October 1941 when output reached a level 40 per cent above the 1939 monthly average. Production fell off sharply after April 1942 as in the nation, dropping to less than the 1939 level in July. New gains, however, have been made, and in October production was 26 per cent above the 1939 average. Some indication of the backlog of orders during the fall of 1941 and the spring of 1942 is revealed by the fact that the high and low points in the volume of orders occurred as much as two to three months before similar levels in production. District pulp production since early fall has been above the output of a year ago. Many of the domestic and foreign sources of pulp have been cut off, and with transportation shortages, it is necessary for many mills to rely more upon locally produced pulp from their own plants or others nearby. A good deal of pulp was added to inventories before the WPB restricted inventories in October 1942.

GOVERNMENT CURTAILMENT ORDERS

Beginning with November 1942, production of most paper and paperboard products in the United States was restricted by General Preference Order M-241 to the monthly average production of individual mills (of more than one paper-making machine) during the period April to September 1942, inclusive. During this period the industry as a whole operated at about 87 per cent of theoretical capacity, while paperboard was at a rate of 78 per cent. An amendment to M-241, announced by WPB on January 8, 1943, and allowing an increase in some essential papers, changes the base period to the six months between October 1, 1941 and March 31, 1943 when output averaged 104 per cent of capacity. Production is now limited to the following percentages of base period output: newsprint, 90; groundwood, 80; writing, 90; wrapping, 85; tissue, 100; absorbent, 80; container board, 100; set-up box board, 80; cardboard, 80; and special industrial board, 90.

The purpose of the "paper freeze order," as it is generally known, is to lay the basis for a balanced program of reduced production and possible concentration of the industry in Canada and the United States. According to the War Production Board, "the ultimate object is to reduce the production of paper products down to an essential level, and thereby to release for war purposes, labor, power, transportation and materials." M-241 also provides that inventories of distributors and consumers shall not exceed a ninety-day supply; no mills may resume production which have not produced paper or paperboard after August 1, 1942; and there is an option for companies operating more than one mill to submit to the WPB voluntary proposals for combining production quotas.

Many additional phases of the industry have been covered in other preference, limitation, and price orders, and amendments. Limitation Order L-120 and its revisions on simplification and standardization of paper reduce the number of grades, colors, weights, and sizes; M-251 states that the WPB will control the nation's pulpwood supplies whenever necessary; OPA Order No. 257 places ceiling prices on pulpwood in Michigan, Wisconsin, and Minnesota; and ODT Order No. 21 requires certificates of necessity for trucks hauling pulpwood, pulp, paper, and other materials since November

15, 1942. The only woodpulp now allowed to be shipped from the Pacific Northwest to the East is specialty pulps used in making rayon and for ordnance purposes, thus cutting off the supply of pulp for paper-making which formerly came to the mills in the Seventh District and other sections of the country. To avoid a serious dislocation in the industry, the WPB has allocated Eastern, Lake states, and Canadian pulps, when available, to domestic consumers whose shipments from the West Coast have been curtailed. The new Controlled Materials Plan of the WPB, effective during the second quarter of 1943, will unquestionably affect the ability of the pulp and paper industry to get certain strategic metal products needed in production.

ESSENTIALITY OF PAPER AND PAPERBOARD

Since the shift of emphasis throughout the nation to the production of goods which directly further the war effort, the question has been raised as to the essentiality of paper in the prosecution of the war. This is obviously a difficult problem to decide because of the wide variety of types of paper and paper products and the extent of curtailment or concentration which may be effected with a minimum of disruption among companies, mills, and employees, and communities.

Paper in many forms has become a necessity. In 1941, the consumption of paper in the nation was approximately 300 pounds per capita. For many war purposes, paper produced in the Seventh District is indispensable and has substituted satisfactorily for many critical metals. Paperboard and wrapping paper are required for shipping food, clothing, medicinal supplies, and a myriad of other materials needed by the armed forces. Paper is needed for blueprints for planes, ships, tanks, and guns. Plastics made from paper are coming into use in war production. Records and record-keeping in peace or war would be virtually impossible without paper. Many domestic uses of paper, e.g., for sanitary purposes and containers, are vital necessities. On the other hand, many of the civilian paper frills in packaging, merchandising, advertising, and publishing probably can be restricted or eliminated as a necessary contribution to winning the war. Depending on the types of paper, some Seventh District mills are producing from 20 to 85 per cent of their goods for direct war use.

Number of Towns Having Pulp and Paper Mills, Number of Mills, Total Employees and Additional Dependents, by States for Seventh Federal Reserve District, 1942, with Percentages of the United States Totals.

State	Towns With Pulp and Paper Mills		Pulp and Paper Mills		Total Employed by Pulp and Paper Mills		Additional Persons Dependent on Mills	
	Number	Per Cent of U.S.	Number	Per Cent of U.S.	Number	Per Cent of U.S.	Number	Per Cent of U.S.
Illinois.....	19	3.7	27	2.8	4,702	2.5	24,165	2.6
Indiana.....	18	3.5	20	2.0	2,858	1.5	16,349	1.8
Iowa.....	3	.6	3	.3	426	.2	1,875	.2
Michigan.....	29	5.7	68	7.0	13,263	7.1	56,492	6.2
Wisconsin.....	33	6.5	84	8.7	15,973	8.6	63,892	7.0
Total District States.....	102	20.0	202	20.8	37,222	19.9	162,773	17.8
Total United States.....	511	100.0	969	100.0	185,719	100.0	913,038	100.0

Source: American Paper and Pulp Association.

Several machine shops of the paper mills are making metal products for prime war contractors.

BASIC FACTORS INVOLVED IN PRODUCTION

The four basic factors needed in the production of paper are: pulpwood, manpower, steam or electrical energy, and mill supplies and equipment. A shortage of any one of these will quickly reduce output, as will transportation difficulties in bringing men and materials to producing centers. The pulpwood situation for some mills is now severe because of the scarcity of timber men to cut the trees in both American and Canadian forests. This affects all mills whether they manufacture their own pulp or buy it. However, a number of the mills in the Seventh District have sought to forestall an immediate pulp shortage by building up large inventories of pulpwood. Restrictions, however, have been placed on pulp inventories. In some instances, pulpwood supplies on hand are estimated to be sufficient for more than a year of production at current rates. Mill operators are deeply concerned about these abnormally large inventories, since there is danger that they may not be able to liquidate them because of changing market conditions or new curtailment orders. For most purposes other than paperboard making, ordinary "waste paper" is not very suitable for new paper-making, especially when paper of a high quality is required.

Many of the paper mills in the Seventh District are located in regions comparatively unaffected by large-scale industrial war plants, and hence thus far have experienced little or no difficulty except for Selective Service in maintaining an adequate supply of workers. There has been a slight drain of manpower from paper mills to shipbuilding and metal fabricating plants in Wisconsin, a more serious shift into machine tool, tank, and ordnance plants in Michigan, and some movement into ordnance and other war plants in Illinois and Indiana. As war production centers expand their labor requirements in future months, there is the strong possibility that paper mills will lose skilled workers, the number depending, of course, upon the type and scope of new job and industry "freezing" orders and interpretations.

The requirements for steam and electrical energy in the pulp and paper industry are high. Mills in Wisconsin and Michigan are commonly located along rivers and in many instances generate their own power. Other mills rely upon steam generators or purchase electricity from utility companies. When other war production in-

dustries compete for this energy, the paper mills face shortages that may become increasingly serious.

The production of pulp and paper requires the use of elaborate and costly machinery and many chemicals. While few serious shutdowns have occurred among the mills because of inability to obtain metal replacement parts, most maintenance engineers have had to develop numerous substitute parts from time to time to keep the machinery in constant operation on the five- to seven-day week and 24-hour schedules maintained by many mills. Chemicals for making, bleaching, and treating pulp and paper have become increasingly scarce and have already necessitated the lowering of quality of some papers.

NEW PAPER PRODUCTS AND BY-PRODUCTS

The substitution of paper and paper products for critical war materials, especially metals, has attracted considerable interest and attention in recent months. Intensive research at the mills and in conjunction with highly trained specialists of the industry's own Institute of Paper Chemistry at Appleton, Wisconsin has led to the development of stronger and waterproof papers, plastics, and a host of new by-products from waste-liquors of the paper-making process. Paper is now used in packaging many foodstuffs and liquids which formerly required metal containers. Synthetic resins are impregnated in papers to give special qualities needed in transporting goods overseas under a wide variety of weather and landing conditions. Some of the new by-products have reached commercial production, but many are still in the experimental stage. The possibilities for new and substitute products appear to be virtually unlimited and promise to affect considerably the industry's position during the war and in the post-war period.

DISTRIBUTIVE CHANNELS

The growing importance of direct mill sales to the Government during the defense-war period already has had some repercussions on wholesale paper dealers by limiting the volume of paper available for them. They obviously are also affected by the amounts which they can sell, particularly to printers and converters of paper products whose own customers' demands have changed because of war conditions. As the materials needed to maintain paper quality standards become more difficult to obtain, many paper manufacturers are concerned about losing "good-will" formerly attached to their branded products. If quality standards are lowered substantially, some favor suspending branded papers and offering general "war-time grades."

Machinery Shortage Another Challenge to Farmers

The crisis in agriculture which threatens to develop within the coming year will quite probably be the greatest in the nation's history. The tremendous needs for food and fiber brought about by the huge requirements of our Allies, our military forces, and a greatly expanded civilian domestic demand confront American agriculture with a production problem that calls for 1943 goals larger even than the 1942 record output by 2 or 3 per cent.

That it will be a critical situation arises not from any deficiency of land resources or skill on the part of the farmer, but rather from the confining, ever increasing limitations thrust upon him by the war—shortages of farm labor, of machinery and equipment, of fertilizers and chemicals, and restriction of transportation facilities. If the situation were critical with respect to only one of the major elements of labor, machinery, fertilizer, etc., the farming operations of this country have sufficient elasticity to permit adjustments to be made that would largely meet any one critical shortage. But when all the major factors of control that are needed by the producer for expansion are short at the same time, nearly all elements of the agricultural economy are put under strain by such a program as faces the farmers for 1943. The objectives of governmental agricultural policy for the coming year are in the form of production goals calling for expansion of output in livestock (especially hogs and lard), milk and dairy products, poultry products, and oil-bearing crops such as soybeans and flax. With the loss of more than 1,600,000 men from the farms, about two-thirds to war industries and one-third to the armed services, additional burden is put on the available farm machinery and equipment. The extreme shortage of farm machinery and equipment for the coming year has led some observers to remark that farmers got through such years as 1932 with no more machinery than will be available for purchase in 1943, but the answer that has been made to this view is that in 1932 there was a superabundance of farm help at very low wages.

The importance of machinery and equipment to the five states of the Seventh District is especially marked, since the use of machinery here is much greater than in the balance of the country. According to the 1940 census of agriculture, these five states, which had 16 per cent of the number of farms in the United States and 12 per cent of the total farm acreage, had 27 per cent of the total reported value of farm machinery and implements, including automobiles.

The concentration of production in the farm machinery industry in the states of the Seventh District is even more marked. According to data from the 1940 Census of Manufactures, about four-fifths of the total

United States value of tractors produced were turned out in plants in the five states of the District. In agricultural machinery other than tractors, over three-fourths of the value of products was produced in the Seventh District states. Many of the firms in the District are relatively large and have already gone a long way in conversion to war orders.

Those who thought that the limitations imposed upon production of agricultural implements and machinery for the November 1, 1941-October 31, 1942 period were drastic have been given a new jolt in the provisions for the current year, 1942-1943. Under the order of WPB applying to the past year, strategic materials were allocated to permit production of 83 per cent of the 1940 output of new machines, and about 150 per cent of the 1940 tonnage of repair parts. The WPB order applying to the current year limits the production of new machinery to about 20 per cent of the 1940 production by total tonnage, and the production of repair parts to 130 per cent of the value of repair part sales for the average of the calendar years 1940 and 1941.

The farm equipment industry is the first to be "concentrated" under the WPB general plan to concentrate industrial production for war purposes. According to the plan as worked out for this industry, the manufacturers are divided into three classes, designated A, B, and C. The A producers are those whose total net sales were more than \$10,000,000 for the calendar year 1941. Class B producers are those with net sales in excess of \$750,000 but not over \$10,000,000. Class C producers are those whose net sales were less than \$750,000 in 1941. The quotas of production, as worked out and released by WPB, are specific as to types and classes of machines and equipment, with a separate percentage quota for each class of producer for each item, or type. Although there are a few exceptions, the general pattern of the order is to allow a larger percentage quota to Class B producers than to Class A, and a larger quota to Class C than to Classes A or B. On many items the quota for Class A and Class B producers is zero per cent, with the output of these items concentrated in the plants of Class C producers. On other items Class A quota is zero per cent while Class B producers are allowed a small quota which is, in turn, smaller than the Class C quota. The base against which the percentage is figured is the producer's entire production by weight of the particular item in 1940 or 1941, whichever is higher.

The general objective of the concentration plan is to get the larger producers in given industries converted almost entirely to war work, leaving the production of civilian goods in the hands of the smaller producers. For farm machinery and equipment special effort was

made to get the production into the smaller plants in areas where there was no labor shortage. For repair parts, the quotas are not differentiated as between the three classes of producers. Therefore, the manufacture of the bulk of repair parts will remain in the hands of the producers who have made them in the past. Quotas for export are also established on approximately the same basis as prevailed in the expiring order except that under the new order either an export license from the Board of Economic Warfare or an order approved under Lend-Lease authority is required. In addition to repair parts, such items as tractors, tractor-mounted implements, combines, harness, hardware, and hand tools are exempted from the concentration schedules.

The quotas established in the schedules of the order make up in total only 75 per cent of the materials allocated to the industry for next year's production. The remaining 25 per cent is to be allocated later by WPB on the basis of the efficient use of existing inventories in the industry, and of labor available, and to take care of inequities that may develop between producers of approximately the same size. Any producer not expecting to use his quota for a specific item is required to notify WPB, which will in turn reassign the quota to producers who can use it.

Two serious objections have been raised to the order. One is the general objection by observers that the cut in output is entirely too drastic and will not permit farmers enough machinery and equipment to meet the goals expected of them. For example, in the schedules for "other dairy equipment," which includes milk pails, milk strainers, sterilizing tanks, washing tanks, and water heaters, the quotas for A and B producers are zero per cent, while the quota for C producers in Class C is 36 per cent. It is said that the producers in this class are not manufacturers of this equipment. The effect of the quota, therefore, is to cut off supplies of this needed equipment unless the quotas are readjusted so as to allocate them to producers who are able to supplement their war production with output of these items.

A second and perhaps more serious objection to the order is raised by members of the industry who point out that the bulk of the output is concentrated in the plants of the smaller producers who do not have the

distribution and servicing facilities on a scale commensurate with the job. The area over which the products will have to be distributed is many times that provided by the facilities of the Class C producers.

Rationing of farm machinery and equipment has been assigned to the United States Department of Agriculture, which has announced that the items will for the present be rationed by the County War Boards. All stocks of new farm machinery and equipment were frozen as of November 1, pending rationing. The freeze order was partly relaxed on November 27 when retail stocks were released, leaving stocks of manufacturers, distributors, and jobbers frozen on most items. Manufacturers' stocks of hay balers, water systems, pumps, and windmills were partially released with the requirement that manufacturers must hold back 40 per cent of their quota on these items for later release.

Retail prices continue under the order issued last May. Ceilings on wholesalers' and manufacturers' prices were issued effective as of November 15, setting the level at that prevailing March 31. Meanwhile reports from farm sales of machinery throughout the District bring to light numerous instances of major items having been sold after two or three years of use at prices considerably above original purchase price, with some instances of machines bringing as much as two or three times the purchase price in spite of having been used for some time.

What devices will be found by the ingenious farmer to meet the shortage of equipment and machinery remain to be seen. Some observers feel that there is a substantial amount of "stretch" in the existing machinery on farms, that much of it is not now used up to its capacity, and that part of the problem can be met by trading machinery work, by custom work, by loaning of machinery, and by rental arrangements. Probably some relief will be had from this source but some farmers have a natural reluctance to risk the care of their machinery under these devices. The Secretary of Agriculture has asked for a larger quota of output from WPB, and the latter is said to have indicated that some further additions may be made to quotas. Whatever the facilities ultimately provided, the farmers of the nation may be counted upon to show their patriotism by doing their best with what they have.

Seventh District Civilian Population Estimates

The war effort and the defense program have brought tremendous shifts in population, from civilian life to the armed services, from non-war to war production centers, from agriculture to industry, from the home and the office to the factory, and from private employment to Government employment. The extent of some of these population movements can be seen in estimates recently released by the United States Bureau of the Census. No data on numbers of persons in the armed forces are given; figures refer to civilians throughout.

The five states included in whole or in part in the Seventh District, which had 22,226,000 civilians in 1940, gained 356,000 persons or 1.6 per cent during the period between the Census enumeration in April 1940 and the sugar ration registration in May 1942. Twenty-three metropolitan areas in the Seventh District increased their populations by 547,000 persons or 5 per cent during the period, revealing the overwhelming dominance of movement into urban communities. The total civilian population of continental United States remained practically unchanged, the excess of births over deaths, and the net immigration of civilians being approximately cancelled by inductions into and enlistments in the armed forces.

Michigan which currently has the third largest volume of war contracts in the United States led the nation in population increase, 311,000 persons or nearly 6 per cent. Also reflecting dominant industrial war production, Illinois gained 133,000 persons and Indiana, 66,000 persons. On the other hand, Iowa and Wisconsin, having substantially smaller volumes of war contracts, lost 81,000 and 72,000 persons, respectively. These losses were mainly from agriculture and civilian work to war industries and related services.

The population shifts have been uneven not only among Seventh District states but also within each of the states. Virtually without exception, the movements have been into areas dominated by war industries and other war activities.

The Detroit metropolitan area comprising Macomb, Oakland, and Wayne Counties enlarged its civilian population by 336,000 persons or 14.2 per cent during 1940-42, an amount greater than any other metropolitan area in the nation. The in-migration to Detroit obviously accounts for most of Michigan's gains, since Kalamazoo was the only other metropolitan area in the state which showed an increase in population during the period. The Flint, Lansing, and Saginaw-Bay City metropolitan areas had slightly smaller civilian populations in May 1942 than in April 1940.

The Chicago metropolitan area, including Cook, DuPage, and Lake Counties, in Illinois, and Lake County in Indiana, a nationally important steel and heavy industry production center, gained 149,000 persons or 3.3 per cent. Within Illinois, the Decatur and Rockford metropolitan areas showed moderate gains in population; while the Peoria and Springfield metropolitan areas reported small losses.

Three important Indiana centers of war industries, Indianapolis, Fort Wayne, and South Bend, each increased their populations by more than 5,000 persons by 1942 as compared with two years earlier. The population of the Terre Haute metropolitan area remained unchanged.

Iowa's over-all population losses between April 1940 and May 1942 are principally the result of out-migration from non-metropolitan areas. While the state as a whole lost 81,000 persons, the Cedar Rapids, Davenport, Des Moines, and Waterloo metropolitan areas each actually gained from 1,000 to 13,000 persons, indicating a strong internal shift to war production centers within Iowa as well as migration from the state. A similar pattern of population relocation has taken place in Wisconsin where the state also had an appreciable loss in population. However, the Madison metropolitan area reported only a slight gain, and the Milwaukee and Racine-Kenosha areas only very slight losses during the period, emphasizing the greater losses of the non-metropolitan centers of the state.

PRELIMINARY ESTIMATES OF CIVILIAN POPULATION
Seventh District States and Continental United States
April 1, 1940 and May 1, 1942

State	Total Population April 1, 1940		Estimated Civilian Population April 1, 1940		Estimated Civilian Population May 1, 1942		Estimated Increase in Civilian Population April 1, 1940—May 1, 1942	
	Number	Per Cent of United States	Number	Per Cent of United States	Number	Per Cent of United States	Number	Per Cent
Illinois.....	7,897,241	6.0	7,875,107	6.0	8,008,067	6.1	132,960	1.7
Indiana.....	3,427,796	2.6	3,427,792	2.6	3,493,515	2.7	65,723	1.9
Iowa.....	2,538,268	1.9	2,536,432	1.9	2,455,132	1.9	-81,300	-3.2
Michigan.....	5,256,106	4.0	5,250,591	4.0	5,562,183	4.2	311,592	5.9
Wisconsin.....	3,137,587	2.4	3,136,884	2.4	3,064,356	2.3	-72,528	-2.3
FIVE STATES TOTAL....	22,256,998	16.9	22,226,806	16.9	22,583,253	17.2	356,447	1.6
UNITED STATES TOTAL..	131,669,275	100.0	131,323,136	100.0	131,315,393	100.0	-7,743	.....

Source: Bureau of the Census, United States Department of Commerce.

PRELIMINARY ESTIMATES OF CIVILIAN POPULATION
 Seventh District Metropolitan Areas, April 1, 1940 and May 1, 1942

Metropolitan Areas and Counties	Total Population April 1, 1940	Estimated Civilian Population April 1, 1940	Estimated Civilian Population May 1, 1942	Estimated Increase Civilian Population April 1, 1940 — May 1, 1942	
				Number	Per Cent
CEDAR RAPIDS..... Linn County, Iowa	89,142	89,000	90,000	1,000	1.1
CHICAGO..... Cook, DuPage and Lake Counties, Illinois; Lake County, Indiana	4,581,111	4,576,000	4,725,000	149,000	3.3
DAVENPORT—ROCK ISLAND—MOLINE..... Scott County, Iowa; Rock Island County, Illinois	198,071	198,000	211,000	13,000	6.6
DECATUR..... Macon County, Illinois	84,693	85,000	88,000	3,000	3.5
DES MOINES..... Polk County, Iowa	195,835	195,000	197,000	2,000	1.0
DETROIT..... Macomb, Oakland and Wayne Counties, Michigan	2,377,329	2,374,000	2,710,000	336,000	14.2
FLINT..... Genesee County, Michigan	227,944	228,000	227,000	-1,000	-0.4
FORT WAYNE..... Allen County, Indiana	155,084	155,000	165,000	10,000	6.5
GRAND RAPIDS..... Kent County, Michigan	246,338	246,000	246,000	*	*
INDIANAPOLIS..... Marion County, Indiana	460,926	458,000	492,000	34,000	7.4
KALAMAZOO..... Kalamazoo County, Michigan	100,085	100,000	105,000	5,000	5.0
LANSING..... Ingham County, Michigan	130,616	131,000	129,000	-2,000	-1.5
MADISON..... Dane County, Wisconsin	130,660	131,000	135,000	4,000	3.1
MILWAUKEE..... Milwaukee County, Wisconsin	766,885	767,000	766,000	-1,000	-0.1
PEORIA..... Peoria and Tazewell Counties, Illinois	211,736	212,000	202,000	-10,000	-4.7
RACINE—KENOSHA..... Kenosha and Racine Counties, Wisconsin	157,552	157,000	155,000	-2,000	-1.3
ROCKFORD..... Winnebago County, Illinois	121,178	121,000	131,000	10,000	8.3
SAGINAW—BAY CITY..... Bay and Saginaw Counties, Michigan	205,449	205,000	204,000	-1,000	-0.5
SIOUX CITY..... Woodbury County, Iowa	103,627	104,000	97,000	-7,000	-6.7
SOUTH BEND..... St. Joseph County, Indiana	161,823	162,000	167,000	5,000	3.1
SPRINGFIELD..... Sangamon County, Illinois	117,912	118,000	116,000	-2,000	-1.7
TERRE HAUTE..... Vigo County, Indiana	99,709	100,000	100,000	*	*
WATERLOO..... Black Hawk County, Iowa	79,946	80,000	81,000	1,000	1.3
TOTAL 23 SEVENTH DISTRICT AREAS.....	11,003,651	10,992,000	11,539,000	547,000	5.0
TOTAL 137 UNITED STATES AREAS.....	66,569,734	66,375,000	68,228,000	1,853,000	2.8

*Estimate no change.
 Source: Bureau of the Census, United States Department of Commerce.

WHOLESALE TRADE Seventh Federal Reserve District				
Commodity	Per Cent Change Nov. 1941 to Nov. 1942			
	Net Sales	Stocks	Accounts Outstanding	Collections
Drugs and Drug Sundries	+14.1	- 2.4	- 5.2	+20.3
Electrical Goods	-49.0	-57.5	-38.9	-28.3
Groceries	+23.3	-13.1	+ 5.5	+21.9
Hardware	-23.3	-35.6	-30.4	- 9.1
Jewelry	-33.8	+ 2.8	-49.6	+23.3
Meats and Meat Products	+49.2	- 7.2	+29.8	+31.3
Paper and Its Products	-17.8	+ 8.4	-26.2	-28.1
Tobacco and Its Products	+ 9.6	-37.5	+18.1	+25.2
Miscellaneous	+ 3.7	-15.4	-21.9	- 0.6
Total	+ 2.9	-24.0	-18.3	+ 6.1

Source: Bureau of the Census, United States Department of Commerce

MONTHLY BUSINESS INDEXES						
Data refer to Seventh District and are not adjusted for seasonal variation unless otherwise indicated. 1935-39 average = 100	Nov. 1942	Oct. 1942	Sept. 1942	Nov. 1941	Oct. 1941	Sept. 1941
MANUFACTURING INDUSTRIES:						
Durable Goods:						
Employment	162	160	156	157	157	156
Payrolls	250	243	229	192	192	186
Non-Durable Goods:						
Employment	118	119	123	119	120	125
Payrolls	160	157	153	139	140	142
Total:						
Employment	147	146	145	144	144	146
Payrolls	222	216	205	176	176	172
FURNITURE MANUFACTURING:						
Orders in Dollars	139	137	202	169	186	203
Shipments in Dollars	176	177	151	203	233	206
PAPER MANUFACTURING:*						
Tonnage Production	133	134	121	140	144	137
PETROLEUM REFINING—(Indiana, Illinois, Kentucky Area):*						
Crude Runs to Still	170	172	175	167	168	169
Gasoline Production	140	145	147	161	165	166
BITUMINOUS COAL PRODUCTION:*						
Illinois, Indiana, Iowa, and Michigan	149	144	144	141	126	127
BUILDING CONTRACTS AWARDED:						
Residential	300	258	190	209	263	237
Total	150	266	422	167	200	155
DEPARTMENT STORE NET SALES:*						
Chicago	147	140	129	135	122	134
Peoria	193	170	203	161	118	195
Fort Wayne	214	192	179	162	153	161
Indianapolis	178	167	168	151	137	154
Milwaukee	181	157	156	156	123	143
Other Cities	168	154	155	147	124	152
Seventh District—Unadjusted . .	153	147	141	133	118	138
Adjusted						

*Daily average basis.

BANK DEBITS Debits to deposit accounts, except interbank accounts					
	(In thousands of dollars)			Per Cent Change November 1942 from	
	Nov. 1942	Oct. 1942	Nov. 1941	Oct. 1942	Nov. 1941
ILLINOIS:					
Aurora	13,991	16,385	14,922	-15	- 6
Bloomington	18,736	19,328	14,249	- 3	+31
Champaign-Urbana	20,165	24,387	19,337	-17	+ 4
Chicago	4,183,857	4,727,568	3,840,908	-12	+ 9
Danville	12,787	15,998	12,027	-20	+ 6
Decatur	46,129	62,239	33,259	-26	+39
Elgin	10,643	11,245	9,986	- 5	+ 7
†Joliet	27,685	33,850		-18	
Moline	12,493	13,829	13,394	-10	- 7
Peoria	81,289	87,617	77,901	- 7	+ 4
Rockford	44,998	49,185	42,155	- 9	+ 7
Springfield	37,560	40,482	29,622	- 7	+27
INDIANA:					
Fort Wayne	56,670	65,797	43,770	-14	+29
Gary	28,679	30,039	24,279	- 5	+18
Hammond	13,026	13,567	12,476	- 4	+ 4
Indianapolis	324,463	368,334	275,556	-12	+18
†Lafayette	14,584	16,508		-12	
†Muncie	20,315	22,425		- 9	
South Bend	57,720	59,984	52,940	- 4	+ 9
Terre Haute	37,714	43,478	31,016	-13	+22
IOWA:					
†Burlington	11,629	12,990		-10	
Cedar Rapids	37,069	42,051	33,192	-12	+12
Clinton	9,361	11,034	7,381	-15	+27
Davenport	25,277	30,621	26,318	-17	- 4
Des Moines	114,163	128,427	107,964	-11	+ 6
Dubuque	13,170	14,566	12,798	-10	+ 3
Mason City	13,578	16,855	12,874	-19	+ 5
Muscatine	4,893	5,439	4,577	-10	+ 7
†Ottumwa	18,099	20,097		-10	
Sioux City	59,097	67,450	51,394	-12	+15
Waterloo	25,714	29,530	24,705	-13	+ 4
MICHIGAN:					
Adrian	6,063	6,857	5,544	-12	+ 9
Battle Creek	22,012	23,342	18,034	- 6	+22
Bay City	23,282	19,670	15,438	+18	+51
Detroit	1,844,597	1,929,745	1,390,274	- 4	+33
Flint	37,363	38,652	34,207	- 3	+ 9
Grand Rapids	71,871	86,127	72,668	-17	- 1
Jackson	25,267	28,554	21,012	-12	+20
Kalamazoo	31,951	33,423	32,019	- 4	+ 3
Lansing	44,912	51,678	32,473	-13	+38
†Muskegon	29,281	33,129		-12	
†Port Huron	13,736	14,733		- 7	
Saginaw	32,323	33,753	29,622	- 4	+ 9
WISCONSIN:					
Green Bay	20,231	22,718	19,531	-11	+ 4
†Madison	49,214	51,343		- 4	
Manitowoc	11,323	12,796	9,291	-12	+22
Milwaukee	402,073	442,678	343,863	- 9	+17
Oshkosh	11,084	13,260	10,816	-16	+ 2
†Racine	30,939	31,553		- 2	
Sheboygan	23,983	27,803	27,204	-14	-12
TOTAL 41 CENTERS	7,911,577	8,766,491	6,890,996	-10	+15
TOTAL 50 CENTERS	8,478,787	9,402,422		-10	
UNITED STATES:					
274 CENTERS	50,673,000	55,056,000	45,076,000	- 8	+12

†New reporting centers for which figures were not collected before May 1942.

*Decrease of less than one per cent.

DEPARTMENT AND APPAREL STORE TRADE										
Seventh Federal Reserve District										
Locality	Total Net Sales			Per Cent Change November 1942 from November 1941			Stocks on Hand (End of Month)		Orders Outstanding	
	Per Cent Change November 1942 from		Per Cent Change January through November 1942 from January through November 1941	Open Book Sales	Instal- ment Sales	Cash and C.O.D. Sales	Per Cent Change November 1942 from		Per Cent Change November 1942 from	
	October 1942	November 1941					October 1942	November 1941	October 1942	November 1941
Chicago.....	- 6.2	+ 5.2	+ 5.4	- 7.2	-19.7	+23.1	- 2.5	+13.3	+ 6.0	+41.6
Peoria.....	+ 5.7	+ 1.8	+ 2.9	.....	.....	.....	.....	.....	.....	.....
Fort Wayne.....	- 2.9	+13.5	+21.5	-11.5	.....	+53.6	+ 1.4	+ 1.8	.....	.....
Indianapolis.....	- 1.8	+30.2	+17.4	+ 9.5	- 8.1	+61.9	- 4.7	+ 8.4	+20.1	+58.0
Des Moines.....	+ 7.4	+13.2	+ 8.1	.....	.....	.....	.....	.....	.....	.....
Sioux City.....	- 2.2	+24.5	+ 7.0	.....	.....	.....	.....	.....	.....	.....
Detroit.....	- 0.7	+21.0	+18.4	+ 0.5	- 6.4	+44.8	-10.1	+12.9	- 0.6	+29.4
Flint.....	- 1.5	+32.3	- 1.0	.....	.....	.....	.....	.....	.....	.....
Grand Rapids..	-11.8	+ 8.2	+ 4.7	.....	.....	.....	.....	.....	.....	.....
Lansing.....	- 5.0	+28.0	+ 8.7	.....	.....	.....	.....	.....	.....	.....
Milwaukee.....	- 6.4	+14.8	+15.1	+ 0.7	-13.1	+41.2	- 1.1	+26.6	+ 6.5	+54.3
Other Cities....	-10.0	+11.2	+ 6.8	- 5.7	- 4.2	+39.2	- 3.6	+ 3.3	- 4.9	+26.9
District total...	- 4.8	+12.6	+10.3	- 3.3	-12.9	+34.9	- 4.0	+12.9	+ 2.8	+38.4
Apparel stores..	- 9.0	+28.9	+14.9	- 0.2	.....	+56.8	- 1.4	+23.3	+21.0	+125.4

National Summary of Business Conditions

(By the Board of Governors of the Federal Reserve System)

Aggregate industrial production in November was maintained close to the October level, reflecting a continued growth of output in war industries and a seasonal decline in production of civilian goods. Distribution of commodities to consumers rose further in November and the first half of December, reducing somewhat the large volume of stocks on hand. Retail food prices continued to advance.

Production—Maintenance of industrial production in November when the seasonal tendency is downward was reflected in a rise of the Board's seasonally adjusted index from 189 to 191 per cent of the 1935-1939 average. This rise was largely accounted for by a further advance in output of durable manufactures. Nondurable manufactures declined seasonally, while output of minerals showed less than the usual seasonal decrease. In all groups of products the proportion of output for war purposes was considerably larger than a year ago.

The increase reported for durable manufactures from October to November was in finished munitions and industrial equipment for new plants which will be completed in large number over the next few months. Steel production, at 98 per cent of capacity in November and the first three weeks of December, was down slightly from the October peak, but the reduction appeared temporary as the scrap supply situation had been relieved and as further progress was being made on construction of additional iron and steel capacity. Supplies of iron ore on hand are regarded as sufficient for operations at capacity until movement of ore down the lakes is resumed in the spring. Shipments from Upper Lake ports this year totaled 92 million tons, and were 15 per cent above the record established in 1941.

At cotton textile mills activity was maintained at a high level in November and at shoe factories production declined less than is usual at this season. Output of manufactured foodstuffs showed a seasonal decline.

Construction contract awards in November were 10 per cent below the level of the three preceding months, according to data of the F. W. Dodge Corporation, but were still about 40 per cent higher than in November of last year. As in other recent months, publicly-financed work accounted for over 90 per cent of all awards.

Distribution—Distribution of commodities to consumers increased further in November and December with active Christmas buying. At department stores, variety stores, and mail-order houses serving rural areas, sales in November expanded more than seasonally. In the first half of December department store sales continued to rise sharply and were considerably larger than a year ago.

Freight-car loadings in November declined about 7 per cent from their peak levels in September and October, but on a seasonally adjusted basis rose slightly over the October level. Coal loadings rose somewhat although a decline is usual in November. Shipments of other commodities declined seasonally.

Commodity Prices—Grain prices advanced from the middle of November to the middle of December, while most other wholesale commodity prices showed little change.

Retail food prices increased further by 1 per cent in the five weeks ending November 17 to a level 16 per cent higher than in November 1941. Prices of such fresh foods as are uncontrolled—fruits, vegetables, and fish—showed the largest advances from October to November, but price increases in controlled items contributed about two-fifths of the total rise.

Bank Credit—During the period of large-scale Treasury financing in December, total excess reserves of member banks were generally above 2.5 billion dollars. Substantial purchases of Government securities for the Federal Reserve System offset the effect of drains on reserves by the continued heavy currency outflow and further increases in required reserves resulting from a rapid growth in bank deposits.

Reserve Bank holdings of Government securities showed an increase of 850 million dollars in the four weeks and reached a total of 5.5 billion on December 16.

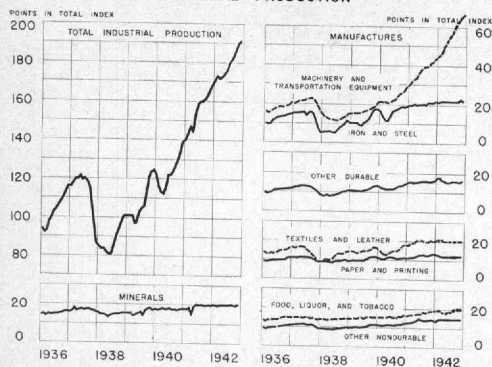
At reporting member banks in 101 leading cities holdings of United States Government securities increased by 800 million dollars in the four weeks ending December 9. Treasury bills accounted for practically the entire increase, with almost two-thirds of the amount going to New York City banks. In the week ending December 16, bond holdings rose sharply as banks received their allotments of the new 1½ per cent bonds subscribed on November 30-December 2; allotments of this issue to all banks totaled 2 billion dollars, representing 85 per cent of subscriptions.

Total loans showed little change over the four weeks ending December 9. Commercial loans declined by 200 million dollars, with about half the decline at New York City banks, while loans to brokers and dealers increased over the period, reflecting largely advances made to security dealers in New York in connection with the Victory Fund drive.

Payments by bank depositors for new Government security issues resulted in a decline of adjusted demand deposits and a rise of U. S. Government deposits to 5.8 billion dollars in mid-December, the largest total on record.

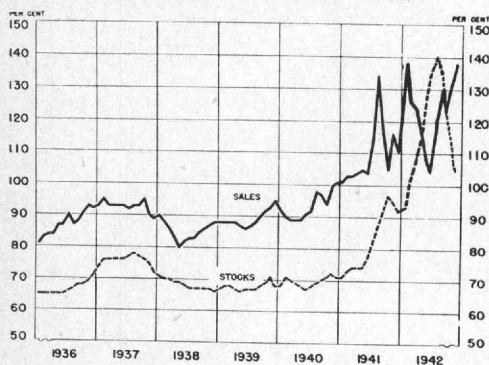
United States Government Security Prices—Prices of United States Government securities have been steady in the past three weeks following an adjustment in the latter part of November when the Treasury announced the drive to sell 9 billion dollars of securities in December. Long-term taxable bonds are selling on a 2.36 per cent yield basis on the average and long partially tax-exempt bonds on a 2.09 per cent basis.

INDUSTRIAL PRODUCTION



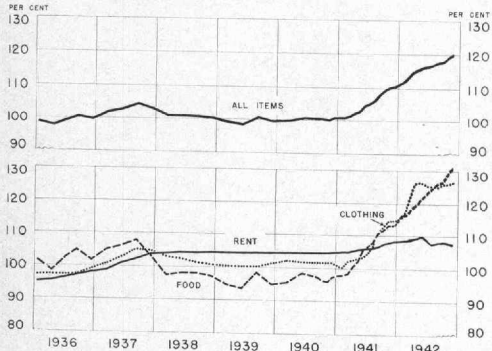
Federal Reserve monthly index of physical volume of production, adjusted for seasonal variation, 1935-39 average = 100. Subgroups shown are expressed in terms of points in the total index. Latest figures shown are for November 1942.

DEPARTMENT STORE SALES AND STOCKS



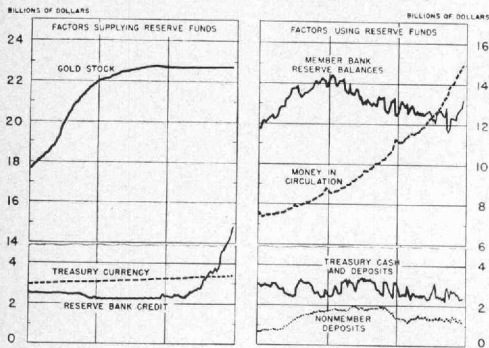
Federal Reserve monthly indexes of value of sales and stocks, adjusted for seasonal variation, 1923-25 average = 100. Latest figures shown are for November 1942.

COST OF LIVING



Bureau of Labor Statistics' indexes, 1935-39 average = 100. Fifteenth of month figures. Last month in each calendar quarter through September 1940, monthly thereafter. Latest figures shown are for November 1942.

MEMBER BANK RESERVES AND RELATED ITEMS



Wednesday figures. Latest figures shown are for December 9, 1942.

SEVENTH FEDERAL



RESERVE DISTRICT